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Conference Abstract

Managing 3D Collections Data: Developing Systems and Metadata for 3D Digitization at Scale

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Abstract

As 3D digitization becomes more common in collections documentation and research, there is a growing need for tools which address the special needs of 3D data stewardship. Systems are needed to manage both the scan data collected during digitization activities, as well as the 3D models generated from that data. These systems need to be able to preserve and make transparent the complex relationships inherent in the data created from 3D digitization activities. They need to connect digital surrogates back to the objects they represent as well as provide an easy way to discover and retrieve that data for research, conservation, and public access. At the core of such systems there needs to be metadata models that can account for the intricacies and specific needs of managing 3D data.

This year, the Smithsonian Institution will be deploying new infrastructure which does just that, based on a metadata model developed by a cross disciplinary working group comprised of content experts from across the institution. The platform, which not only manages scan data, but also automates the processing and delivery of 3D digitized content, is open source and is built around modular design principles for easier adoption.

This talk builds upon last year's SPNHC presentation "Automating 3D collection capture: Developing systems for 3D digitization at scale" as it addresses the information systems and infrastructure needed to support the management and delivery of 3D data at scale. We will cover the basic functionality of the Smithsonian's 3D data repository, how it facilitates data administration, the workflows involved in managing and processing data, and how it

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connects to the larger Smithsonian infrastructure. As part of this, we will explore the metadata model behind the system and how the model can support greater usability and transparency when sharing and working with 3D scan data.

Keywords

3D metadata, 3D data management, automation, infrastructure, data repository,

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